of this character and their relations to weather changes. A long series of such observations should also be of value in connection with the study of the effect of weather conditions upon crop growth. The results thus far obtained are therefore published at this time without further discussion.

The observations on the polarization of sky light after sunset in Table 12, and on the polarization at different distances from the sun, in Tables 13 and 14 are still to be added. In general, it was found that when the sunset colors were brilliant and extended to the zenith the polarization was less than on evenings when the colors were not so pronounced.

Since the Pickering polarimeter is not well adapted to measuring the polarization when at a minimum, the position of the neutral points of Arago, Brewster, and Babinet could not be accurately determined. The observations of January 6 and 8 indicate that the position of Arago's neutral point was about 25° above the antisolar point, while those of January 10 indicate that it was about 30° above, but these observations in connection with those of February 24 and March 3 and 25 indicate the presence of neutral belts rather than of neutral points.

TABLE 14.—*Percentage of polarization of sky light at points at different distances from sun.*

On horizontal circle passing through sun.				On horizontal circle passing through point of maximum polarization.			
February 24.				March 3.			
Sun's—		Azimuth from sun.	P.	Sun's—		Azimuth from sun.	P.
Azimuth.	Altitude.			Azimuth.	Altitude.		
°	°	°	*Per cent.*	°	°	°	*Per cent.*
.....	.....	.....	.....	307.1	30.9	0	+ 1.6
310.0	30.2	20	+ 1.5	307.1	30.9	20	+ 2.0
310.0	30.2	40	− 1.7	309.1	32.0	40	± 0.0
311.0	30.7	60	−12.0	309.1	32.0	60	− 1.0
311.0	30.7	80	−19.5	312.0	33.2	80	−17.4
312.9	32.1	100	−22.1	312.0	33.2	100	−18.3
312.9	32.1	120	−11.5	313.7	34.5	120	− 6.4
314.4	33.0	140	+ 9.5	313.7	34.5	140	+13.4
314.4	33.0	160	+24.0	314.5	35.8	160	+40.5
316.0	34.0	180	+34.0	314.5	35.8	180	+45.9
316.0	34.0	200	+30.3	322.6	39.8	200	+42.1
325.0	38.2	220	+26.5	322.6	39.8	220	+25.9
325.0	38.2	240	+ 4.4	325.1	40.3	240	+ 4.9
326.9	39.0	260	− 8.8	325.1	40.3	260	− 7.5
326.9	39.0	280	−12.6	327.3	41.0	280	−12.2
328.3	39.5	300	− 8.9	327.3	41.0	300	− 8.0
328.3	39.5	320	− 5.2	328.2	41.7	320	− 1.9
330.1	40.0	340	− 2.0	328.2	41.7	340	+ 0.9
Maximum polarization.....			43.3	.....	.....	.....	.....

CLIMATOLOGICAL DATA FOR JAMAICA.

Through the kindness of Mr. H. H. Cousins, chemist to the government of Jamaica and now in charge of the meteorological service of that Island, we have received the following table in advance of the regular monthly weather report for Jamaica:

Comparative table of rainfall for July, 1903.

Divisions.	Relative area.	Number of stations.	Rainfall.	
			1903.	Average.
	Per cent.		*Inches.*	*Inches.*
Northeastern division	25	24	4.42	8.19
Northern division	22	53	2.20	3.23
West-central division	26	26	7.79	8.19
Southern division	27	36	2.78	4.36
Means	100	139	4.30	5.99

The rainfall for July was therefore below the average for the whole Island. The heaviest fall was 18.08 inches at Kings Valley in the west-central division; while no rain fell at Irish Town in the northeastern division or at Richmond Pen in the northern division.

RECENT PAPERS BEARING ON METEOROLOGY.

Dr. W. F. R. PHILLIPS, Librarian, etc.

The subjoined titles have been selected from the contents of the periodicals and serials recently received in the library of the Weather Bureau. The titles selected are of papers or other communications bearing on meteorology or cognate branches of science. This is not a complete index of the meteorological contents of all the journals from which it has been compiled; it shows only the articles that appear to the compiler likely to be of particular interest in connection with the work of the Weather Bureau. Unsigned articles are indicated by a ——.

Science. New York. N. S. Vol. 18.

Ward, R. DeC. The Climate of Benguet, Philippine Islands. [Note.] Pp. 90–91.

Ward, R. DeC. The Recent Floods. [Note.] P. 91.

Ward, R. DeC. Rainfall and Sunspots. [Review of article by W. J. S. Lockyer.] Pp. 91–92.

Rotch, A. Lawrence. Meteorological Observations with Kites at Sea. Pp. 113–114.

Ward, R. DeC. Climate and Crops in the Argentine Republic. [Review of article by J. Russell Smith.] Pp. 154–155.

Ward, R. DeC. Kite-flying in Scotland and the Cyclone Theory. [Note on article by W. H. Dines.] P. 155.

Ward, R. DeC. Carbon Dioxide in London Railway Carriages. [Note.] P. 155.

Ward, R. DeC. Health on the Isthmus of Panama. [Review of article by Henry L. Abbot.] P. 185.

Scientific American Supplement. New York. Vol. 56.

Guarini, Emile. A Method for the Study of Storms. P. 23065.

Nature. London. Vol. 68.

Wilson, W. E. Radium and Solar Energy. P. 222.

Thorpe, T. E. "Red Rain" and the Dust Storm of February 22. Pp. 222–223.

Marshall, P. Dust Storms in New Zealand. P. 223.

Shaw, W. N. The Thunderstorm of May 31. P. 247.

Lockyer, William, J. S. On a Probable Relationship between the Solar prominences and Corona. Pp. 257–259.

Lagrange, Ch. The Source of Radium Energy. P. 269.

Lockyer, William J. S. A Multiple Lightning Flash. P. 270.

Bianco, Ottavio Zanotti. The Moon's Phases and Thunderstorms. P. 296.

Boys, C. V. The Passage of Sound through the Atmosphere. Pp. 145–150.

Quarterly Journal of the Royal Meteorological Society. London. Vol. 29.

Brodie, Frederick J. The Prevalence of Gales on the Coasts of the British Islands during the 30 years 1871–1900. Pp. 151–171.

Dines, W. H. Formation of Cumulus Cloud. [Reprint from Symons's Meteorological Magazine.] P. 179.

—— Shrinkage of the Thames and Lea. [Review of Report by Mr. Fitzmaurice.] Pp. 179–180.